

REMARKS

Pursuant to the restrictions of the claimed inventions dated July, 25, 2003, September 17, 2005, and March 31, 2005, claims 62 – 65, 68 – 81, and 91 – 97 are being examined. (See also page 3, section 5, and page 3, section 5 of the Office Action dated March 31, 2005). Non-elected claims 66 and 67 have been withdrawn, but these claims are dependent on independent claim 62 being examined.

Except for the obviousness double-patenting rejection, independent claim 72 and dependent claims 73 – 93 are allowable. Applicant believes that the obviousness double-patenting rejection is moot in view of the various restriction requirements made in this application, and the five-way restriction requirement issued during the prosecution of US Patent 6,201,639. Applicant's representative respectfully invites the Examiner for a telephone interview to discuss the obviousness double-patenting rejection (Should it be necessary, Applicant may be able to provide a Terminal Disclaimer to overcome the obviousness double-patenting rejection).

Applicant agrees with the amendments to the specification proposed by the Examiner.

In the Office Action of March 31, 2005, the Examiner rejected claims 62 – 65, 68 – 71 and 94-97 under 35 U.S.C. §112, first paragraph. Applicant respectfully disagrees with this rejection. To expedite prosecution of this application, Applicant further amended claim 62 to clarify the focusing mechanism. The focusing mechanism is constructed to focus light provided by the objective lens with respect to the surface being scanned. There is no recitation that would require a teaching or any disclosure directed to move or operate the lens for focusing. Dependent claim 65 recites a tilting mechanism constructed to tilt said examined surface for focusing light passing through the objective lens. While claim 62 generically claims the embodiment claimed in claim 65, both these claims are fully supported by the pending specification.

The Examiner rejected claims 62, 63, 68, 69, 95 and 97 under 35 U.S.C. §102(b) as anticipated by US Patent 5241,364 to Kimura. Applicant respectfully disagrees with

this rejection. To expedite prosecution of this application, Applicant included an additional distinction into claim 62.

Independent claim 62 is directed to a scanner for delivering excitation light and detecting excited fluorescent light. The present scanner includes a scanning assembly for displacing an objective lens in a scanning motion, while the optical path provided by the displaced objective lens and the scanning assembly has a substantially constant length (i.e., the optical pathlength from the source and to the detector doesn't vary substantially). Furthermore, the objective lens provides "an optical path from the light source to the examined surface and from the examined surface fluorescent light, excited in response to the excitation beam, to a light detector," as claimed in claim 62.

The Examiner cited the teaching of Kimura in col. 21 and Figs. 9 – 11, but that teaching fundamentally differs from the scanner of claim 62. In that scanner of Kimura, as stated by the Examiner, a lens 117 delivers light from the light source, while a different lens 119 collects the light from object 123. Furthermore, the optical pathlength between a lens 120 and a lens 136 varies during the scanning motion.

To expedite prosecution of this application, Applicant amended claim 62 to recite: "said displaced objective lens and said scanning assembly providing said optical path having substantially constant length and extending partially over an axis of the scanning motion." This amendment is fully supported by the pending specification. See at least Figs. 3, 4, 11 and 12, and note the axis A. For example, the pending specification recites: "FIGS. 3, 11 and 12 illustrate diagrammatically rotary oscillating structures 19 that carry a micro lens 18. The rotary structure 19 is of extremely low mass and is mounted to rotate on axis A. It carries two turning mirrors, mirror 15 that lies on the axis of the rotating arm and lens-illuminating mirror 17 that is on-axis with the objective lens 18. Stationary optics include a final stationary mirror 21 that is maintained in alignment with the on-axis mirror 15 that rotates with the scanner arm, to form a periscope."

Kimura does not disclose (and does not even suggest) any scanner with the optical path extending partially over an axis of the scanning motion. Kimura discloses a driving mechanism 33 or 133 displacing an assembly 115.

For the above reasons, claim 62 is clearly patentable over US Patent 5241,364 to Kimura. Claims 63, 68, 69, 95 and 97 depend on claim 62 and are thus patentable therewith.

In the Office Action of March 31, 2005, the Examiner also rejected claims 62 and 65 under 35 U.S.C. §103(a) as obvious over US Patent 5,578,818 to Kain et al, in view of US Patent 4,948,330 to Nomura et al. Applicant respectfully disagrees with this rejection.

Independent claim 62 is directed to a scanner for delivering excitation light and detecting excited fluorescent light. The present scanner includes a scanning assembly for displacing an objective lens in a scanning motion. The scanning assembly is constructed to receive a light excitation beam emitted from a light source and provide the excitation beam in a scanning motion to an examined surface, while the optical path of the beam extends partially over the displacement axis of the scanning motion. Kain alone, or in combination with Nomura, does not disclose such scanner. In US Patent 5,578,818 to Kain discloses a fundamentally different scanner including a scan head 20 constructed and operating in a different way than the claimed invention. The teaching of Nomura is directed to an alignment stage device and not to a scanner or scanning assembly.

Furthermore, Kain does not disclose a scanner (claimed in claim 62) including a focusing mechanism constructed to focus said objective lens with respect to the surface being scanned (as previously acknowledged by the Examiner).

In U.S. Patent No. 4,948,330, Nomura discloses an alignment stage device for a **reticle mask**, having first and second stages supported on a base and movable in those directions which are perpendicular to each other on a horizontal plane, and a third stage provided with stands on which a workpiece is mounted, and movable relative to each of the stages. When the first stage is moved, the second and third stages are moved together with the first stage and when the second stage is moved, the third stage is moved together with the second stage and wherein the first and second stages are square frames each having center opening and the second stage is arranged in the center opening of the first stage while the third stage is arranged in the center opening

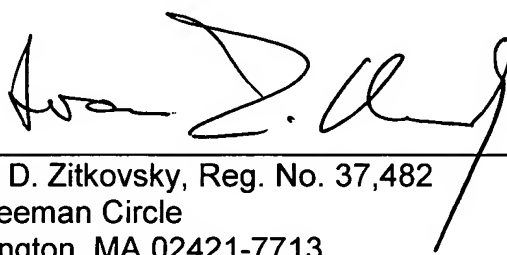
of the second stage. There is no suggestion to combine the device of Nomura with the scanner of Kain to arrive at the claimed scanner with all claimed limitations,

Therefore, claims 62 and 65 are clearly patentable over US Patent 5,578,818 to Kain et al in combination with US Patent 4,948,330 to Nomura.

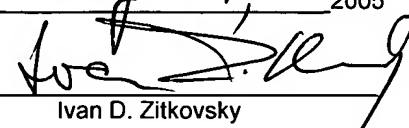
Accordingly, all pending claims 62 – 81 and 91 - 97 are in condition for allowance and such action is respectfully requested.

Please any charges or credits to the Deposit Account No. 01-0431.

Respectfully submitted,


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